



सत्यमेव जयते

Government of India
Ministry of Environment and Forests

F. No. J-11011/7/2011-IA-II (I)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail: tchand2003@yahoo.co.uk
Telefax: 011: 2436 3963

To

Dated: 10th March 2014

M/s Steel Authority of India Limited,
(Chandrapur Ferro Alloy Plant),
(Formerly M/s Maharashtra Elektros melt Limited)
Ispat Bhawan, Lodhi Road,
Post Box 3049, New Delhi – 110 003.
E-mail: melproject@yahoo.in Fax: 07172- 255812/255437

Subject: Expansion of Ferro alloys capacity from 0.1 MTPA to 0.1725 MTPA by installation of 1X45 MVA Submerged Electric Arc Furnace & 4 MW Gas based Power Plant at SAIL- **Chandrapur Ferro Alloy Plant of M/s Steel Authority of India Limited - [Formerly M/s Maharashtra Elektros melt Limited]**, district Chandrapur in Maharashtra – **Environmental Clearance – reg.**

Sir,

This is with reference to your letter no. CFP/PROJ/ENV-CLEARANCE/2012-13/1964 dated 2.7.2012 along with copies of EIA-EMP report and subsequent communications dated 24.8.2012, 15.1.2013, 11.2.2013, 12.8.2013 and 07.02.2014 seeking environmental clearance under the provisions of EIA Notification, 2006. The Terms of Reference (TOR) for the aforesaid project was accorded by the Ministry vide letter of even no dated 14.03.2011.

2. The Ministry of Environment and Forests has examined the application for the above project. It is noted that M/s Steel Authority of India Limited - Chandrapur Ferro Alloy Plant [Formerly M/s Maharashtra Elektros melt Limited] have proposed for expansion of Ferro alloys capacity from 0.1 MTPA to 0.1725 MTPA by installation of 1X45 MVA Submerged Electric Arc Furnace & 4 MW Furnace Gas based Power Plant at SAIL-CFP, Chandrapur in Maharashtra. All the Ferro Alloy Plants are listed at S.No. 3(a) in Primary Metallurgical Industries under category 'A' of the Schedule of EIA Notification, 2006 requiring an Environmental clearance from the MOEF. It is noted that the existing unit was commissioned in 1977 and did not require Environmental Clearance at that time. Total project area is 212.69ha and the proposed expansion will be done within the existing plant area. Total plantation at the premises of SAIL-CFP is spread over an area of 75 ha, which is about 35% of the total area. It is proposed to plant 2,000 tree saplings every year to nearby villages. As per the authentication provided by the Chief Wildlife Warden – Government of Maharashtra on 11.2.2013, the distance of the project site from Tadoba Andhari Tiger Reserve (TATR) is 16.57 km and the distance from buffer of TATR is 5.15 km, at the western most tip of the broader TATR corridor. The project has been approved by the National Tiger Conservation Authority (NTCA) vide letter F.N. 7-12/2013-NTCA dated 20.11.2013. Notified archaeological sites like Achaleshwar Temple, Mahadev Temple, Mahakali Temple are at a distance of 3 km (approx.) from the project. The project is located at a distance of 10.7 km from MIDC, Chandrapur, 15.2km from Ballarpur, 21.7km from Ghuggus, and

17.6km from Tadali Critically Polluted Areas. Public Hearing/Public Consultation meeting was conducted by the Maharashtra Pollution Control Board on 21.4.2012. The total project cost is Rs. 221.42 crores and Rs. 12 crores is allocated towards the pollution control measures.

3. The details of the existing and proposed product are given below:

S. N.	Facilities/Products	Existing	Proposed	Total
1	Submerged Arc Furnace (MVA)	2 x 33	1 x 45	111
2	Furnace Gas based Power Plant (MW)	1 x 4.2	1 x 4	8.2
	Production			
a)	Ferro manganese (HCF _e -Mn) (TPA)	59,160	37,500	96,660
b)	Silico manganese (Si-Mn) (TPA)	45,540	35,000	80,540
	Total (TPA)	1,04,700	72,500	1,77,200

4. It is noted that Particulate Matter (PM) emissions from the furnaces will be effectively collected through a Gas Cleaning System. The furnace gas cleaning system will consists of Wet Scrubber Type GCP and Effluent Treatment Plant. Adequate Stack Height will be provided for the furnace & power plant. Dry fog dust suppression system will be provided at all transfer points of Raw Material charging system for dust suppression. For preventing spreading of emissions during hot metal tapping, high efficiency bag filters will be provided. Raw material handling section would be provided with dust suppression/dust collection systems. Covered conveyor belts will be used to prevent fugitive emissions. Online stack monitors shall be provided for Furnace & Power Plant Stacks.

5. The total water requirement for proposed expansion will be 4,080m³/day and will be sourced from ground water. All the buildings of proposed project will be provided with suitable rainwater harvesting system. The water requirement for the SAF is only for cooling purpose and for cleaning of waste furnace gases. There would be no discharge outside the project area. The slurry from the Gas Cleaning Plant (GCP) will be treated in the Effluent Treatment Plant and Clarified water shall be recycled to the GCP. The effluent treatment plant shall be designed so as to maintain zero discharge.

6. It is noted that the Fe-Mn Slag will be used for Si-Mn production and Si-Mn slag will be supplied to Western Coalfields Limited for mine stowing. The GCP sludge will be used in the existing Sinter Plant. The used/spent oil be sold to authorized reusers/ recyclers registered with CPCB/ MoEF.

7. The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 2nd meeting held during 29-31st October, 2012. The Committee sought additional information for reconsideration. The additional information was submitted on 11.2.2013 and the proposal was reconsidered by the REAC (Industry) in its 6th meeting held during 5-7th March 2013. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.

8. Based on the information submitted and presentation made thereon by you and your consultant, M/s. Anacon Laboratories Private Limited Nagpur, the Ministry of Environment and Forests hereby accords environmental clearance to the above-mentioned project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

- i. The company shall prepare the Wildlife Conservation Plan for conservation of schedule- I fauna in consultation with the State Wildlife Department. The funds earmarked for the implementation of the Wildlife Conservation Plan shall not be diverted for any other purposes. In addition, the following conditions shall be followed:
 - a. All activities are located within the existing boundary wall that surrounds the existing plant wherein the company is authorized to start such activities.
 - b. Area outside the boundary wall but within the land owned by MEL (legally deforested but by appearance of a forest), is a good quality natural forest having potential for wildlife presence & dispersal shall be maintained.
 - c. Forest Department having jurisdiction over 10km radial zone from MEL may be involved by MEL management in monitoring wildlife and possible impacts of pollution in adjoining legally deforested area owned by MEL –outside compound wall (because this is close to the western extent of corridor & proposed eco-sensitive zone).
- ii. In addition, the following conditions shall be followed:
 - a. No vehicular movement for material transportation to-from the plant shall be done during 7.00 AM to 6.00 PM on working days only.
 - b. Use of horns/sirens shall be restricted and of low decibel.
 - c. The movement to-and-from the plant should be by an existing road only.
- iii. A five member monitoring committee with Regional Chief Conservator of Forests (RCCF) as Chairman shall be constituted. The Committee shall meet twice in a year to review programme of works prescribed in the conservation plan. The monitoring reports shall be forwarded to Chief Wildlife Warden with a copy to the Regional Office of this Ministry at Bhopal for ensuring compliance of observations/recommendations of the monitoring reports.
- iv. A study on possible impact of pollution which may adversely affect the habitat in the adjoining corridor area and preventive steps in this regard shall be carried out through a reputed institute and report shall be submitted to Regional Office of the Ministry at Bhopal within 6 months from the date of issue of the letter.
- v. No charcoal shall be used as fuel. Pet coke shall be used as fuel instead of charcoal from unknown sources.
- vi. Continuous monitoring facilities for the process stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace shall be provided to control emissions below 50 mg/Nm³.
- vii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.

- viii. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. The raw material storage shall be covered.
- ix. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.
- x. The total water requirement for proposed expansion shall not exceed 4080 m³/day. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the plant premises. Approval of the competent authority shall be obtained for using groundwater.
- xi. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- xii. Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn). The Fe-Si and Si-Mn slag shall be used in the preparation of building materials.
- xiii. No Ferro chrome shall be manufactured without prior approval from the Ministry of Environment and Forests.
- xiv. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xv. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 21st April, 2012 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bhopal.
- xvi. As proposed, green belt shall be developed in at least 33 % of the project area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xvii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
- xviii. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.



B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of PM₁₀, PM_{2.5}, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhopal and the SPCB/CPCB once in six months.
- iv. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- ix. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhopal. The funds so provided shall not be diverted for any other purpose.
- x. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website




and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhopal. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- xii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions.
 - xiii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhopal by e-mail.
 - xiv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Bhopal.
 - xv. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
12. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


(Dr.T.Chandini)
Director

Copy to:

1. The Secretary, Department of Environment and Forests, Govt. of Maharashtra.

- 
2. The Additional Principal Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, Link Road No.3, E - 5, Arera Colony, Bhopal - 462 016.
 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi . 110 032.
 4. The Chairman Maharashtra Pollution Control Board, Kalpataru Point, 3rd & 4th Floor, Sion Matunga Scheme, Road No.8, Opp. Cine Planet Cinema, Near Sion Circle, Sion(East),Mumbai-400 022.
 5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
 6. Guard File/Monitoring File/Record File.

